

Appendix F
Equipment Production Rates

EVAPORATION POND INTERIM REMOVAL ACTION
THUMB POND AND SUB AREA A PRODUCTION RATES

VLT Material	pounds/cubic foot	pound per cubic yard	ton/cubic yard
Approximate Excavated Moist Weight	115.0	3,105	1.6
Material Volumes	yards	tons	
NVLT	722	1,121	
Thumb Pond	44,000	68,310	
Total Tons		69,431	
SVLT	8,078	12,541	
Sub Area A	31,600	49,059	
Total Tons		61,600	

Road Data	Length	Speed/Limit
NVLT Road Length	2,310	
Ramp Lengths	500	10
Curve and Straight	2,110	20
Average Speed (mph):		19
Average cycle time (minutes):		1.4
South VLT Road Length	15,583	
Ramp Lengths	7700	10
Curve and Straight	7883	20
Average Speed:		15.1
Average cycle time (minutes):		11.7

Equipment Capacity	average yards	average tons
Caterpillar 740	25.1	39.0
Production Rate		
NVLT/Thumb Pond		
Load (988 Loader)	5	minutes
Dump	5	
Wait	5	
Cycle Time	1.4	
Minutes Per Cycle	16.4	
Potential Cycles Per Hour	3.7	cycle/hour
Conservatively use three 740's at 3 cycles /hour ¹	351	tons per hour
Total Hours Production Time	198.0	hours
Total Weeks Production Time (40 Hours/Week)	4.9	weeks
SVLT/Sub Area A		
Load (988 Loader)	5	minutes
Dump	5	
Wait	5	
Cycle Time	5.1	
Minutes Per Cycle	20.1	
Cycles Per Hour	3.0	cycle/hour
Conservatively use three 740's at 3 cycles /hour ¹	349	tons per hour
Total Hours Production Time	176.6	hours
Total Weeks Production Time (40 Hours/Week)	4.4	weeks
Estimated Schedule		
Mobilization:	3	weeks
SVLT and Sub Area A completed first	4.4	
NVLT Portion	4.9	
Demobilization	2	
Estimated Project Duration:	14.4	weeks
	3.6	months

Notes:

1) System limited by loader capacity using 9 loads at 5 minutes each (75% Utilization)